APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,440	09/05/2003	Veshaal Singh	50277-2209	8474

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EXAMINER
PATEL, MANGLESH M

ART UNIT	PAPER NUMBER
2178	

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12/28/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/656,440	SINGH, VESHAAL
	Examiner	Art Unit	
	MANGLESH M. PATEL	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *02 December 2009*.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,4-12,33-35 and 41-55* is/are pending in the application.
　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1,4-12,33-35 and 41-55* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
　　a) ☐ All   b) ☐ Some * c) ☐ None of:
　　　1. ☐ Certified copies of the priority documents have been received.
　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.
　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This **FINAL** action is responsive to the amendment filed on 12/2/2009.

2.   In the amendment claims 1, 4-12, 33-35 and 41-55are pending. Claims 41-55 are new.

Claims 1 and 42 are the independent claims.

Withdrawn Rejections

3.   The 35 U.S.C. 112 first paragraph rejection of claim 1 has been withdrawn in light of the

amendment.

4.   The 35 U.S.C. 103(a) rejections of claims 1, 4-12, 17, 20-28 and 33-40 with cited

references of Vedula (U.S. 6,823,495) in view of Shadmon (U.S. 6,804,677) has been withdrawn

in light of the amendment.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> (e) the invention was described in a patent granted on an application for patent by another
> filed in the United States before the invention thereof by the applicant for patent, or on an
> international application by another who has fulfilled the requirements of paragraphs (1),
> (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for
> patent.

6.   Claims 1, 4-12, 33-35 and 41-55 are rejected under 35 U.S.C. 102(e) as being anticipated

by Manning et al. (U.S. 6,959,416, filed on Jan. 30, 2001).

Regarding Independent claims 1 and 42, A computer-implemented method for

generating and using a mapping scheme, the method comprising: Receiving commands

from a user, wherein said commands establish a mapping between attributes of an XML

document and attributes of a relational database; <u>wherein said attributes of said relational</u>

<u>database correspond to columns in tables in said relational database;</u> Based on said

commands, automatically generating a mapping scheme that represents said mapping,

wherein said mapping scheme includes at least one of: multiple attributes of said XML

document mapped to a single attribute of said relational database; and multiple attributes

of said relational database mapped to a single attribute of said XML document; and using

said mapping scheme to perform a single transformation that moves said XML document

directly into said relational database: (a) without materializing the entire XML document

separate from said XML document and said relational database during said

transformation, and (b) without creating and storing any representation of said <u>entire</u>

XML document separate from said XML document and said relational database during

said transformation; <u>wherein using said mapping scheme to perform said single</u>

<u>transformation comprises: determining, based on said mapping scheme, first one or more</u>

<u>column of first one or more tables of said relational database to which a first XML</u>

<u>element of said XML document maps; before processing a second XML element of said</u>

<u>XML document, storing said first XML element in said first one or more columns of said</u>

<u>first one or more tables of said relational database; after storing of said first XML</u>

<u>element is completed, determining, based on said mapping scheme, second one or more</u>

<u>columns of second one or more tables of said relational database to which said second</u>

XML element maps; and storing said second XML element in said second one or more

columns of said second one or more tables of said relational database; wherein the steps

of the method are performed by one or more computing devices.

Manning discloses receiving commands from a user in the form of queries for generating

a mapping between attributes of an xml document and attributes of a relational database

such as tables and columns (column 2, lines 3-56). He teaches automatically generating a

mapping scheme that maps one to many between the XML document and Database

attributes (column 4, lines 25-55). He discloses a single transformation for moving a set

of data from the XML document to the relational database without storing or creating any

representation of the entire XML document, this is done by using the manager program

referencing the mappings to add the document to the repository (column 5, lines 10-36).

He discloses the use of queries for describe how to arrange the data residing within the

relational database tables by collapsing by removing and expanding by adding attributes.

This single transformation is accomplished by using the mappings to determine the first

column of the tables within the relational database as depicted in fig 3 numeral 126 and

then storing the element within the column of tables and then repeating the procedure to

process each element.

Regarding Dependent claims 4 and 43, Manning discloses *wherein said mapping*

scheme further includes instructions on how to collapse a number of attributes of said

source into a smaller number of attributes of said relational database (see column 5,

lines 10- 50 & figs 2, 3 and 7, including the explanation provided in the Independent

claim).

Regarding Dependent claims 5 and 44, Manning discloses *wherein said mapping*

scheme further includes instructions on how to expand a number of attributes of said

source to a greater number of attributes of said target (see column 5, lines 10- 50 & figs

2, 3 and 7, including the explanation provided in the Independent claim).

Regarding Dependent claims 6 and 45, Manning discloses wherein: *The step of*

receiving commands from a user includes receiving user input that specifies a condition,

and an action associated with the condition; and <u>*the step of using said mapping scheme*</u>

<u>*to perform said single transformation*</u> *further comprises the steps of performing an*

operation that includes converting data, based on said mapping scheme, from the source

to a format associated with the target; During performance of said operation, performing

the steps of determining whether the condition is satisfied (); and If the condition is

*satisfied, then performing said action (*see column 6, lines 5- 40 & fig 3, including the

explanation provided in the Independent claim*)*.

Regarding Dependent claims 7 and 46, Manning discloses wherein: *The step of*

receiving commands from a user includes receiving user input that specifies a specific set

of instructions; and <u>*the step of using said mapping scheme to perform said single*</u>

<u>*transformation*</u> *further comprises the steps of performing an operation that includes*

converting data, based on said mapping scheme, from the source to a format associated

with the target; During performance of said operation, executing the specific set of

*instructions to affect said operation (*see column 5, lines 10- 50 & figs 2, 3 and 7,

including the explanation provided in the Independent claim*).*

Regarding Dependent claims 8 and 47, Manning discloses wherein: *The step of*

receiving commands from a user includes receiving user input that declares a variable to

which values can be assigned; The method further comprises the steps of performing an

operation that includes converting data, based on said mapping scheme, from the source

to a format associated with the target; and During performance of said operation, using

said variable (see column 5, lines 10- 50 & figs 2, 3 and 7, including the explanation

provided in the Independent claim).

Regarding Dependent claims 9 and 48, Manning discloses wherein: *The step of*

receiving commands from a user includes receiving user input that specifies a

precompiled routine ; and The method further comprises the steps of performing an

operation that includes converting data, based on said mapping scheme, from the source

to a format associated with the target ; and During performance of said operation,

calling said precompiled routine to affect said operation (see column 5, lines 10- 50 &

figs 2, 3 and 7, including the explanation provided in the Independent claim).

Regarding Dependent claims 10 and 49, Manning discloses: *Reading source data definition that includes information about said attributes of said source; Reading target data definition that includes information about said attributes of said target; Based on said source data definition and said target data definition, presenting to said user an interface that identifies said plurality of attributes of said source and said plurality of attributes of said target; Wherein said step of receiving commands from said user interface is performed by receiving said commands through said interface* (see column 5, lines 10- 50 & figs 2, 3 and 7, including the explanation provided in the Independent claim).

Regarding Dependent claims 11 and 50, Manning discloses *wherein said mapping scheme includes instructions on how to collapse a number of hierarchical levels of said source into a smaller number of hierarchical levels of said target* (see column 5, lines 10- 50 & figs 2, 3 and 7, including the explanation provided in the Independent claim).

Regarding Dependent claims 12 and 51, Manning discloses *wherein said mapping scheme includes instructions on how to expand a number of hierarchical levels of said source to a greater number of hierarchical levels of said target* (see column 5, lines 10- 50 & figs 2, 3 and 7, including the explanation provided in the Independent claim).

Regarding Dependent claims 33 and 52, Manning discloses a plurality of said source are related to each other according to a first hierarchy that includes multiple hierarchical

levels; a plurality of attributes of said target are related to each other according to a

second hierarchy that includes multiple hierarchical levels; and said commands establish,

in said mapping, that a particular hierarchical level of said source is mapped to a

particular hierarchical level of said target, wherein said particular hierarchical level of

said source is at a different depth, within said first hierarchy, than the depth of said

particular hierarchal level of said target within said second hierarchy (see column 5, lines

10- 50 & figs 2, 3 and 7, including the explanation provided in the Independent claim).

Regarding Dependent claim 34 and 53, Manning disclose wherein said single

transformation is performed by executing commands defined in a programming language

that supports operations to fetch said set of data directly from said source and store said

set of data directly into said target (see column 5, lines 10- 50 & figs 2, 3 and 7, including

the explanation provided in the Independent claim).

Regarding Dependent claims 35 and 54, Manning disclose wherein: said mapping

scheme includes instructions which define that operations included in said single

transformation are grouped to represent a transaction; and using said mapping scheme to

perform said single transformation further comprises performing said operations in said

transaction (see column 5, lines 10- 50 & figs 2, 3 and 7, including the explanation

provided in the Independent claim).

Regarding Dependent claim 41 and 55, with dependency of claim 1, Manning wherein

said first one or more columns of said first one or more tables of said relational database

are the same as said second one or more columns of said second one or more tables of

said relational database (see column 5, lines 10- 50 & figs 2, 3 and 7, including the

explanation provided in the Independent claim)

It is noted that any citation [[s]] to specific, pages, columns, lines, or figures in the

prior art references and any interpretation of the references should not be considered

to be limiting in any way. A reference is relevant for all it contains and may be relied

upon for all that it would have reasonably suggested to one having ordinary skill in the

art. [[See, MPEP 2123]]

Response to Arguments

7.   Applicant's arguments filed 12/2/2009 have been fully considered but are moot in view

of the new grounds of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manglesh M. Patel whose telephone number is (571) 272-5937. The examiner can normally be reached on M, W 6 am-3 pm T, TH 6 am-2pm, Fr 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manglesh M. Patel
Patent Examiner
December 18, 2009

/Manglesh M Patel/
Manglesh Patel
Examiner, Art Unit 2178

/Stephen S. Hong/

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